

[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2018-0163; Product Identifier 2017-NM-168-AD; Amendment

39-19386; AD 2018-18-07]

RIN 2120-AA64

**Airworthiness Directives;** The Boeing Company Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 757 airplanes. This AD was prompted by an evaluation by the design approval holder (DAH) indicating that the longitudinal lap splices of the fuselage skin are subject to widespread fatigue damage (WFD). This AD requires repetitive inspections of the longitudinal lap splices of the fuselage skin for cracking and protruding fasteners, and applicable corrective actions. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet https://www.myboeingfleet.com. You may view this service

information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0163.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0163; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is Docket Operations, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT**: David Truong, Aerospace Engineer, Airframe Section, Los Angeles ACO Branch, FAA, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5224; fax: 562-627-5210; email: david.truong@faa.gov.

## SUPPLEMENTARY INFORMATION:

## Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model 757 airplanes. The NPRM published in the <u>Federal Register</u> on March 2, 2018 (83 FR 8951). The NPRM was prompted by an evaluation by the DAH indicating that the longitudinal lap splices of the fuselage skin are subject to WFD. The NPRM proposed to require repetitive inspections of the longitudinal lap splices of the fuselage skin for cracking and protruding fasteners, and applicable corrective actions. We are issuing this AD to address

fatigue cracking of the longitudinal lap splices of the fuselage skin, which could result in reduced structural integrity of the airplane.

#### Comments

We gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment. United Airlines concurs with the actions in the NPRM.

# **Effect of Winglets on Accomplishment of the Proposed Actions**

Aviation Partners Boeing stated that accomplishing the supplemental type certificate (STC) ST01518SE does not affect the actions specified in the NPRM.

We agree with the commenter. We have redesignated paragraph (c) of the proposed AD as paragraph (c)(1) of this AD and added paragraph (c)(2) to this AD to state that installation of STC ST01518SE does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST01518SE is installed, a "change in product" alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.

# **Request for Exception for Inspections of Existing FAA-Approved Repairs**

Delta Air Lines (Delta) asked that we add an exception to allow existing FAA-approved repairs to be exempt from inspections. Delta stated that the note in Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017, only specifies certain Boeing Commercial Airplanes Organization Designation Authorization (ODA) approved repairs are exempt from inspections. Delta stated that limiting approval of this exception to the Boeing ODA only would mean that operators would have to request an alternative method of compliance to apply this inspection exception to any other FAA-approved repairs covering an affected inspection area.

We agree with the commenter's request to allow existing FAA-approved repairs to be exempt from inspections, for the reasons provided. We have added paragraph (h)(3)

of this AD, under "Exceptions to Service Information Specifications," to include that exception.

# Request to Include a Repair Method for Crack Findings

Boeing asked that a statement be included in the proposed AD to specifically require repair of crack findings during inspections using a method approved in accordance with the procedures in paragraph (i) of the proposed AD. Boeing noted that this statement is provided in AD 2016-15-04, Amendment 39-18595 (81 FR 49873, July 29, 2016), which includes lap splice widespread fatigue damage inspection requirements. Boeing added that this statement will make it clear and consistent with the intent of the repair instructions specified in the referenced service information.

We acknowledge the commenter's request. However, the requirement to repair cracks found during any inspections required by this AD is implicit in the requirements of paragraph (h)(2) of this AD. Unlike the previous AD referenced by Boeing, this AD uses high-level language and requires accomplishment of the RC (required for compliance) steps in the service information, which include the inspection and repair actions. Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017, specifies to contact Boeing for repair instructions, as well as to contact Boeing for crack repair instructions or alternate inspection instructions, depending on the condition found. Paragraph (h)(2) of this AD requires operators to use a method approved in accordance with the procedures in paragraph (i) of this AD when the service information specifies to contact Boeing. Therefore, there is no need to include an additional statement to specifically require repair of crack findings during inspections using a method approved in accordance with the procedures in paragraph (i) of this AD. For clarity, we have revised the language in paragraph (h)(2) of this AD to match the language for the conditions specified in Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017.

## **Request to Change or Omit Certain Inspections**

VT Mobile Aerospace Engineering (MAE), Inc., (VT MAE). and FedEx Express (FedEx) asked that we omit or change certain lap splice inspection areas. FedEx stated that its fleet of Model 757-200 airplanes was converted to a configuration similar to that of Model 757-200 special freighter airplanes, in accordance with the VT MAE STCs. VT MAE stated that Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017, identifies the FedEx Model 757-200 fleet as Groups 1, 3, and 4 airplanes, and certain lap splice inspection areas defined for those groups have been modified in accordance with the STCs. VT MAE added that the proposed inspections do not apply to those airplanes, or have reduced repetitive inspection intervals from those specified in Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017.

We acknowledge the commenter's requests. However, we do not consider it appropriate to include various provisions in an AD applicable only to individual airplane configurations or to a single operator's unique use of an affected airplane. Under the provisions of paragraph (i) of this AD, we will consider requests for approval of AMOCs for the inspection areas and repetitive inspection intervals if sufficient data are submitted to substantiate that the AMOC would provide an acceptable level of safety. We have not changed this AD in this regard.

# Request to Include Repair Guidelines and Inspection Procedures

Delta stated that while Boeing may not be able to include repair instructions for fuselage skin cracking at the longitudinal lap joints in all areas, repair guidelines should be included in Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017, so that operators can start damage containment and initial repair actions until specific repair instructions are received from Boeing.

We acknowledge the commenter's concern. However, the referenced service information does refer to certain sections in the 757 Nondestructive Test (NDT) Manual

to provide guidance for fuselage skin cracking conditions. Although operators may refer to the NDT for guidance, the repair must be done using a method approved in accordance with the procedures specified in paragraph (i) of this AD, as specified in paragraph (h)(2) of this AD. Also, waiting for Boeing to change the service information to include additional repair guidelines would delay the release of the AD, and the unsafe condition would not be addressed in a timely manner. Therefore, we have not changed this AD in this regard.

Delta also asked that alternative inspection procedures for protruding head fasteners be included in the Accomplishment Instructions of Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017, so that an AMOC request is not necessary.

We do not agree with the commenter's request that Boeing revise the service information to include alternative inspection procedures for protruding head fasteners. Waiting for Boeing to change the service information to include alternative inspection procedures would delay the release of the AD, and the unsafe condition would not be addressed in a timely manner. Therefore, we have not changed this AD in this regard.

#### Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

# **Related Service Information under 1 CFR part 51**

We reviewed Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017. The service information describes procedures for visual and eddy current inspections of the longitudinal lap splices of the fuselage skin for cracking and protruding head fasteners. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **Costs of Compliance**

We estimate that this AD affects 509 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

#### **Estimated costs**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspections	367 work-hours X \$85 per hour = \$31,195 per inspection cycle	\$0	\$31,195 per inspection cycle	\$15,878,255 per inspection cycle

We have received no definitive data that will enable us to provide cost estimates for the on-condition repairs specified in this AD.

# **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

#### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
  - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

## § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2018-18-07 The Boeing Company**: Amendment 39-19386; Docket No. FAA-2018-0163; Product Identifier 2017-NM-168-AD.

#### (a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

## (b) Affected ADs

None.

#### (c) Applicability

- (1) This AD applies to The Boeing Company Model 757-200, -200PF, -200CB, and -300 series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017.
- (2) Installation of Supplemental Type Certificate (STC) ST01518SE (http://rgl.faa.gov/Regulatory\_and\_Guidance\_Library/rgstc.nsf/0/312bc296830a925c862 57c85006d1b1f/\$FILE/ST01518SE.pdf) does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST01518SE is installed, a "change in product" alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.

## (d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

# (e) Unsafe Condition

This AD was prompted by an evaluation by the design approval holder indicating that the longitudinal lap splices of the fuselage skin are subject to widespread fatigue damage. We are issuing this AD to address fatigue cracking of the longitudinal lap splices of the fuselage skin, which could result in reduced structural integrity of the airplane.

#### (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

# (g) Required Actions

Except as specified in paragraph (h) of this AD: At the applicable times specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017, do all applicable actions identified as "RC" (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017.

#### (h) Exceptions to Service Information Specifications

- (1) For purposes of determining compliance with the requirements of this AD, where Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017, uses the phrase "the original issue date of this service bulletin," this AD requires using "the effective date of this AD."
- (2) Where Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017, specifies contacting Boeing for repair instructions, or contacting Boeing for crack repair instructions or alternate inspection instructions, and specifies that action as RC: This AD requires doing the repair, or the alternate inspection and applicable corrective actions,

using a method approved in accordance with the procedures specified in paragraph (i) of this AD.

(3) Inspections performed in accordance with Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017, are not necessary in areas where existing FAA-approved repairs cover the affected inspection areas; provided the outermost repair doubler extends a minimum of three rows of fasteners above and below the original group of lap splice fasteners subject to the inspection. Damage tolerance inspections specified for existing repairs must continue. Inspections outside of the repaired boundaries are still required as specified in Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017.

## (i) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Los Angeles ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to:
- 9-ANM-LAACO-AMOC-Requests@faa.gov.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.
- (3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO Branch, to make those findings. To be approved, the repair

method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

- (4) Except as required by paragraph (h)(2) of this AD: For service information that contains steps that are labeled as RC, the provisions of paragraphs (i)(4)(i) and (i)(4)(ii) of this AD apply.
- (i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled "RC Exempt," then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.
- (ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

# (j) Related Information

For more information about this AD, contact David Truong, Aerospace Engineer, Airframe Section, Los Angeles ACO Branch, FAA, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5224; fax: 562-627-5210; email: david.truong@faa.gov.

# (k) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

- (i) Boeing Alert Service Bulletin 757-53A0104, dated November 6, 2017.
- (ii) Reserved.
- (3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet https://www.myboeingfleet.com.
- (4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.
- (5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Des Moines, Washington, on August 16, 2018.

Michael Kaszycki, Acting Director, System Oversight Division, Aircraft Certification Service.

[FR Doc. 2018-18995 Filed: 9/4/2018 8:45 am; Publication Date: 9/5/2018]